
The Descriptive Challenges of Fiber Art

LOIS F. LUNIN

ABSTRACT

A DEFINITION OF FIBER ART, its history, materials and techniques, vocabularies, and creators and users of those vocabularies offer background for understanding the problems in preparing surrogates of this relatively recent art form for text and image databases. A few image databases are described; record linkage, hypertext, and hypermedia are mentioned. The article explains that the challenges fiber art presents can be extended to the general problem of terminology and description for any visual object.

INTRODUCTION

Fiber art is both a new and an old art form. "The use of fibrous materials as a medium for art works is not new; woven, knitted, printed, and otherwise treated materials have long appeared in the history of mankind" (Henning, 1977). Traditionally, however, they appeared as functional objects. The term *fiber art*, sometimes called art fabric, was introduced after World War II to characterize new art developments in textiles. This article deals only with the fiber art developments since World War II and the challenges presented in describing that art for inclusion in text and image databases. In time, databases may even contain the sounds of fibers as they move in currents of air. For present use, however, it is difficult enough to concentrate on the description of the physical appearance and condition, the composition, content, and design, and the intent of the art.

DEFINITION

A satisfactory universally accepted definition of fiber art is rather hard to come by. Because definition of any art is difficult, it is satisfying that many artists, writers, and critics agree nontrivially that fiber art is art whose material is fiber—and other components.

Fabric and *textile* are classifications that preceded *fiber art*. Constantine and Larsen (1980) state that the word *fabric* is the generic term for all fibrous constructions. They further explain that the art fabric is a construction, individually created by an artist. It may be woven on the loom or free of the loom, or may be produced by knotting, knitting, crochet, or any other technique. An art fabric, Constantine and Larsen add, is conceived and created by one artist whose efforts, passion, and talent fuse with his/her technical abilities and materials. Artists who work with fiber share the same artistic general art schooling and background, employ technological advances, and enjoy experimentation and manipulation of materials that have stimulated new concepts in all arts of the twentieth century.

HISTORY

Several writers (Constantine & Larsen, 1973; and Brite & Stamsta, 1986, to name a few) agree that the term *fiber art* or art fabric came into use to describe the work of the artist-craftsman following World War II. The term *art fabric* was introduced by Larsen and Constantine "to fill a void since there was no nomenclature to define the work being done in fiber since the 1920s" (Constantine, personal communication, 1990). The loom was reevaluated as an expressive tool, and weavers learned that they could bind fibers into nonfunctional forms with the validity of a work of art (Nordness, 1970, p. 10). Working independently and often in isolation—or, as Corwin says, "ghettoized"—artists in the United States and Europe explored the qualities of fabric or linear elements of linen, sisal, cotton, etc., to develop work that hung on the wall or was free standing, two or three dimensional, flat or volumetric, many stories high or miniature, nonobjective or figurative, and representational or fantasy. Some of the works were rough-textured, some gauze-like. Some were conceived as environmental in that one may walk into and through the structures (DeGraw, 1972). Fiber structure was also created with the use of many nonloom procedures—e.g., knotting, twining, plaiting, coiling, pleating, lashing, interlacing, casting, wrapping, collaging, binding (Perreault, 1986).

In the 1950s came a period of serious recognition of the artist-craftsman's contribution in not only fiber but in several media. During this period the studio artist revolutionized the creative concept of the object. In the late 1950s, Lenore Tawney, a weaver, moved into three dimensional forms with "constructions evoking the power and

spatial relationships of sculpture" (Nordness, 1970, p. 13). The opening of Tawney's exhibition at the Staten Island Museum in 1961 was the first major exhibit of American Art Fabrics, an event that marked the point at which "art fabric was healthfully and joyously launched in America" (Constantine & Larsen, 1980).

Taylor (1983) traced the history of the first through tenth Biennales Internationales de la Tapisserie in Lausanne, Switzerland. During that period she found that the content of the exhibitions shifted from tapestries designed by cartoon-painters and executed by artisans to fiber works conceived and executed by an artist; from two-dimensional mural textiles to three-dimensional works; from works with an aesthetic emphasis on their imagery to those which relied upon the textured or structural qualities of textiles, and other changes reflecting aesthetic concerns relevant to all contemporary art forms.

"Fiber R/Evolution," a landmark exhibition in 1986 developed by the Milwaukee Art Museum, contained two parts: the revolution part of the show displayed works by the creators of the new movement such as Sheila Hicks, Ed Rossbach, and Claire Zeigler. The evolution portion of the exhibition showed works by the artists who came later and whose efforts often grew out of, or were stimulated by, the earlier work (Brite & Stamsta, 1986). Today the art trend in fiber continues with an increasing number of exhibitions and concomitantly a growing number of exhibition catalogs.

The abstracting and indexing services for art reflect both the recency of the fiber art field and a paucity of descriptive terminology. Indexing and abstracting services only recently added the term *textiles* (Shaw, 1990). *Art Index* first used the word *fiber* in volume 19, November 1971-October 1972. *RILA, The International Repertory of the Literature of Art*, appears to have used the term *fiberwork* beginning with the 1980-84 issue, and *ART Bibliographies Modern* first used the term in 1988.

MATERIALS

Contemporary fiber artists have access to vast resources of different fiber types. As DeGraw (1972) notes:

From traditional sources, the artisans may choose the fleece of wild sheep which was first employed by Stone Age hunters some 12,000 years ago. Or they may choose time-honored cotton which...was cultivated on the banks of the Euphrates in 4,200 B.C. Or they may turn to hemp found in China in 3,000 B.C. However, the technology of synthetics has opened new avenues, adding to the visionary impact of the fibre break-through.... (p. 6)

Today artists combine nonfibrous materials with thread, clay, paper, wood; even metal has found its way into the artist's palette. Table

1 is a list of materials and objects culled from the descriptions of

TABLE 1. MATERIALS AND OBJECTS USED IN FIBER ART

abaca	fabric	mylar	rice paper
acrylic	felt	newspaper	rope
agave fiber	fiberboard	newsprint	roving
aluminum	fiberfill	nylon	rubber cables
amate paper	filet netting	nylon mesh	rubber tubing
armature	fire hoses	nylon mono-	safety belts
ash splints	fishnet	filament	safety pins
bamboo	flax	oil pigment	seed pods
banana fiber	floss	paint	sequins
bast	foam	palm	shark's teeth
beads	fossil	palm fronds	shellac
bittersweet vine	fur	paper mache	shells
bones	gauze	papers of Kozo,	silk
brocade	gesso	abaca, mitsu-	sisal
bronze	gimp	mata	stain
buckskin	goatshair	pearl cotton	steel
buttons	gold	photo	steel rod
caning	gold leaf	photosensitized	stone
canvas	grasses	surface	straw
chamois	gut	pigment	styrofoam
chrome plate	hardware	pine needles	synthetic straw
cloth	hemp	pipng cord	tennis nets
clothesline	hide	plastic bags	terylene
coco fiber	horsehair	plastic disc	thread
coconut palm	india ink	plastic netting	Tussah silk
coir	ixtle	plastic sheet	twill brocade
colored pencils	jingle shells	plastic slats	twill tape
copper;	jute	plexiglass	vinyl
copper wire	lace	polyester	vinyl tape
cordage	lacquer	threads	viscose straw
corrugated	leather	polyethylene	waxed linen
paper	linen	polyethylene	white pine bark
cotton	magazine	film	willow
cotton batting;	manila	tubing	wire
floss	marble	polyethylene	wire mesh
webbing	masons cord	twine	wire mesh
zippers	metal	polypropylene	screening
dye (natural)	metallic gold	film	wood
barberry	metallic guimpe	polyurethane	wood shavings
birch leaves	metallic silver	raffia	wood spring
cochineal	mirrors	ramie	clothespins
greenweed	mohair	rayon	wool
indigo	monofilament	rayon flock	xerox (photo-
madder	moosehair	reed	copy)
oak bark	muslin	rhoplex	yarn
enamel		ribbon	

This list is based on the description of fiber work illustrated in *Fiber R/Evolution* and *The Art Fabric Mainstream*, two publications used as examples of the variety of materials and objects. The list is not comprehensive, merely representative of vocabulary in two publications.

fiber objects illustrated in just two publications—*Fiber R/Evolution* (Brite & Stamsta, 1986) and *The Art Fabric Mainstream* (Constantine

& Larsen, 1980). With this list we begin to illustrate some of the complexities that occur in describing fiber art, that almost everything and anything is fair substance for the contemporary artist.

TECHNIQUES

Many processes are employed in producing fiber work. Some of these techniques date back to prehistoric times. Weaving, for example, is one of the earliest techniques but many nonloom procedures—such as twining, knotting, wrapping, sewing, and felting (all earlier than weaving)—were also employed in ancient periods. Today some of these techniques are aided by electronic devices—e.g., the computer-assisted loom. Yet the Jacquard loom—invented in 1780 in France—was controlled by punched cards, a forerunner of the Hollerith cards. Information professionals might be interested to note that it was perhaps Leonardo da Vinci who gave first thought to mechanized weaving when he described the technique: “‘This is second only to the printing press in importance; no less useful in its practical application; a lucrative, beautiful and subtle invention’” (DeGraw, 1972, p. 5).

Table 2 lists some techniques used in fiber art. Although most are old, new techniques are developed occasionally, the product of the creative mind, hand, and new technology. A more complete listing of techniques can be found in the *ARTSearch Techniques Table: Field Descriptions and Valid Field Values* (1988). As stated in the description of the “type” field: “Just as there can be several techniques used to create an object, there can be several types within each of these techniques. There is no limit on the number of techniques or types within techniques that can exist for one object.” A further description of the structures of fabrics can be found in Emery (1980).

VOCABULARIES

A vocabulary to describe the appearance and the meaning of fiber art is evolving. The terms come from many sources. For example, as part of a submission of work to an exhibition, the artist is often required to write a statement of intent. In judging the work submitted, jurors sometimes use another vocabulary; often curators, art critics, writers and editors of art books, educators, and gallery directors use somewhat different terms. The variety of these vocabularies illustrates still another area of complexity. Table 3 lists some of the descriptive terms taken from the *Fiber R/Evolution* and *The Art Fabric Mainstream* cited previously. This is “an amusing, delightful list,” Brandford (personal communication, 1990) commented: “But in the end most if not all of these descriptive terms are not at all specific or unique to fiber.” She asks: “Is a new vocabulary necessary?”

TABLE 2. SOME TECHNIQUES USED IN FIBER ART

airbrush	knotted	stacking
applique	layering	stitching
braiding	leno	tapestry
bunching	looping	tufting
carding	molding	twining
coiling	netting	twisting
couching	plaiting	weaving
crochet	pleating	wefting (discon-
embroidery	puckering	tinuous)(tapestry
flocking	resist dyeing	weaving)
folding	reverse applique	winding
fraying	riveted	wrapping
ikat	shibori	
interlacing	slewing	
interlocking	soldering	
knitting	soumak	

This list is based on the description of fiber work illustrated in *Fiber R/Evolution* and *The Art Fabric Mainstream*. These techniques are examples only of the variety encountered; the list is not representative of the field. For example, quilting, and piecing—three common techniques—were not encountered in these publications.

DESIGN

The artists whose medium is fiber usually have chosen an aesthetic over a utilitarian need. Rutherford's statement (1989) pertains to fiber art as well as to other arts: the elements of line, color, texture, shape and form, and principles of rhythm, unity, balance, and emphasis provide the foundation for decisions; these are the basic elements and principles of design. Today's artist who works with natural fibers or synthetic yarns uses his materials to produce works possessing form and space with surface and mass interchangeable. The works often express the pure design qualities inherent in the artist's techniques, structure, processes, and materials as well as experience and inspirations. Some works, however, are expressive social commentaries.

Color has always been an important element of fiber. Sometimes it is neutral to emphasize form and sometimes bold to focus attention on massive construction (Brite & Stamsta, 1986).

THE CREATORS AND USERS OF FIBER ART VOCABULARIES

People who describe fiber art according to their specific roles—whether writer, art historian, curator, etc.—use a rich language. Table 4 lists some of the many categories of individuals who use those descriptions. The following paragraphs describe the focus of some of those individuals.

TABLE 3. VOCABULARY OF TERMS USED TO DESCRIBE FIBER ART

abstract	dialog	integrity	order, ordered	spiny
accretion	diaphanous	intense, lively	organic	spiraling
systems	dimensions	hues	organic	spirituality
adventure	discipline	intension	dynamics	standardization
agitate	distancing	interpretations	organic	starkness
allusions	durability	intimacy	dynamism	strength
ambiguity	dustfree	intricate	organic shapes	stripcloths
animate	dynamic	intuitive	overtness	sturdy
anthropomor- phic details	elasticity	juxtaposed	overwhelming	suggestion
architectural	elegance	laminations	ovoid form	support
assemblages	elegant	layering	palpable	surface
associations	emotional	layers	pebbly surface	treatment
awkwardness	energy	liberated	pellucid	surfaces
	energy	light re-	pendulous	surprise
basket	conductor	fracting	personal	synthesis of
structure	energy ejector	potential	language	form and
bold reality	enshrinement	lightness	pliability	meaning
brooding	ephemeral	linear	poetic forms	system,
brushed	exactness	linear	portraits	systematic
surface	expansion	qualities	posture	tactile
bubbly surface	expressive	liveliness	potency	experience
bulbous forms	fadeproof	luminosity	power	tempering
ceremonial	festive nature	luster	precise	temporariness
implications	figurative	lyric	presence	tension
chaos	figures	macabre	protection	textile
charge	flat	malleability	purity	textural/
clarity	forceful	mass	quietude	sculptural
clear structure	fragile	meditative	reciprocity of	class
clumsy	framing	memories	image fabric	tonal relation-
cluster	free	metaphor	relics	ships
coloration	freedom	miniatures	resolution	topology
compassion	full grown	modules	revealing	transformation
complete	geometric	moire pattern	rich	translucence
compression	gestural	monumentality	robust	transparency
concealing	gesture	mood	scale	twisted
confinement	glimpses of a	motion	sense of drama	vibrancy
construction	total world	mysterious	sensory impact	visual
containers	glisten	mysteriousness	sensual	metaphor
contemplation	gloomy	narrative	surfaces	voids
cosmos	gossamer	narrative	serenity	volume
counterpoint	grandeur	content	shadow play	voluptuous
the pon-	gravity	neutralization	shell	cascades
derous	harmony	nobility	shimmering	voluptuousness
materials	heroic	noble	slit size	vulnerability
crenellations	illusion	materials	soft	weight
cumbersome	imagery	numerical	soft murals	whimsical
delicate	import	progression	solid and void	wispy
dense	indigenous	opacity	solidity	
depth	architecture	opulence	soul/self	
detail				

This list is based on the description of fiber work illustrated in *Fiber R/Evolution* and *The Art Fabric Mainstream*, two publications used as examples.

Registrar

The registrar or collection manager is responsible for the transportation, packing, storage, and all objects brought into the museum for exhibitions, works lent to other institutions, pending acquisitions, and the recording and documenting of these works (Ricciardelli, 1987). Along with basic information, such as museum number, artist, title, date, medium, dimensions, etc., the registrar uses terms to describe the condition of the work.

TABLE 4. CREATORS AND USERS OF FIBER ART VOCABULARIES

art administrator	gallery director
art historian	iconographer
art librarian	insuror
artist	preparator
collector	public
conservator	publisher
crime detection officer	registrar
critic	restorer
curator	student
editor	supplier
educator	writer
fabricator	

Curator

The curator is concerned with planning, conceptualizing, and selecting works for exhibitions, and for research in the collection. As Constantine (1990) explains, exhibitions are often drawn from collections which have been under the care of the curator where a historical frame of reference is of great importance.

The special knowledge of the field in which the curator works determines the direction. Only by examining what is present in the field; only by examining the tendencies and characteristics of work being done, can a curator determine that indeed there is a cohesive theme running through the work. The cohesion exists in the aesthetic, in structure, and in materials.

A curator may start out by referring to slides and photographs but it is from the work itself that selections are made for exhibitions.... Themes come after and not before the work is examined and assembled.

In considering a fiber piece for exhibit or purchase, for example, the curator wants to see the object itself because few pictures can give the feeling of the texture, the luminosity, and the impact that a large piece can produce when seen both at a distance and up close.

Art Historian

The art historian uses a vast network of resources to explore, reaffirm, reorganize, or negate previous assertions about a work and the culture in which it was created. The materials, design symbolism,

sex of the artist, and culture of the period are all concerns of the art historian who, like the curator but working for a different purpose, wants to have access to many photos for comparison of details of similar work and perhaps even rituals associated with its creation. Though this article is concerned with art works since World War II, these works include those created throughout the world and in enormously varying cultures. For the art historian, a full description of such art is needed.

Art Conservator

The art conservator is concerned with the preservation of the object. Because fiber artists use many man-made materials—for example, polyurethane, polyethylene tubing, plastic garbage bags, electronic wire, etc.—conservators must continually learn about the aging of these materials. Will they yellow, crack, disintegrate, attract insects, absorb moisture and swell, becoming distorted and thereby place a strain on other fibers in the piece if the work consists of more than one kind of fiber? The conservator is the doctor of textiles, specifying the treatment, stabilization, restoration, and mounting for installation, and draws on physics, chemistry, engineering, and art in the care of the art. Twentieth-century developments challenge conservators two ways: how to conserve the objects composed of materials specific to the twentieth century—i.e., man-made fibers—and how to employ twentieth century technology and materials in the conservation procedures. The Getty Conservation Information Network facilitates the retrieval and exchange of information concerning conservation and restoration of cultural property. The network features three online databases—bibliographic, materials, and suppliers.

In addition to those individuals mentioned, iconographers, crime detection officers, art educators, students, collectors, insurers, gallery directors, art administrators, and the public all are potential users of art information. So are critics, artists, art librarians, editors, publishers, restorers, suppliers, and writers. Each brings his or her particular focus of interest to the search or to the writing, and each uses a somewhat different vocabulary.

THE LONGITUDINAL RECORD

The record of a work of fiber art like other works of art can be compared to a longitudinal medical record. The record begins when the piece is created and includes information on the creator(s), full demographic data, education and accomplishments of the artist—where the work was exhibited, honors received, and reproduction (appearance of the work in a catalog, newspaper article, book, etc.). The health of the work is also important. Is it strong enough to

travel? Does it have special requirements for travel? How should it be installed? Does it have a record of repairs and, if so, what kind? All this must be noted in the record. The record must be open ended and continued throughout the life of the object—and perhaps even beyond.

DATABASE RECORD

For the purpose of this article, the database record structure is not as compelling a challenge as the terminology to use within the fields of the record. However, it is important for each of the various users described earlier to know that the record contains all fields needed. For that reason, some of the relevant fields are listed in Table 5. Scott (1988) reports that the catalog database for sculpture at the National Gallery of Art would use at least 300 tags, "breaking down materials, techniques, iconography, and stylistic factors in detail" (p. 137). The basic information involves *when* was the work done, *where*, *by whom*, *how*, and *why*. The same principles apply to fiber art.

TABLE 5. SUGGESTED FIELDS FOR FIBER ART DATABASE RECORD

Artist	Owner
Title of Work	Provenance
Alternate Titles	Provenience
Execution Date, Year	Reproduction (Photos)
Produced	Bibliographic Reference
Media-Material-Fiber	Exhibition History
Content	Installation Considerations,
Type of Execution	Restrictions
(Technique[s])	Basic Condition
Structure(s)	Treatment
Foundry or Weaving	Culture
Studio	Gender Issues
Type of Equipment Used	Accession Number
Theme, Subject	Location
Style, Period	Appraised Value
Color(s)	Insured Value
Dyes Used	Registration Photo
Texture	Year Collected
Decoration-Surface	Remarks
Embellishment	Key Words
Design Symbolism	(Descriptors)
Pattern Repeat	
Size-Dimensions	

COMING TO TERMS WITH THE INFORMATION

For some years, the museum specialists described earlier as well as gallery directors, art librarians, educators, writers, etc. have been aware that more facets of information need to be addressed. In the

1960s computers were looked to for help in the organization, storage, search, and retrieval of such information. The standardization and sharing of such information were noted by David Vance (1975).

AAT Thesaurus

It is now more than a decade since the *Art & Architecture Thesaurus (AAT)* was started. The initial intent of the AAT was to provide catalogers with terminology with which to describe objects, documents about objects, and object and document surrogates. As Bearman (1988) notes, the power of the AAT as a descriptive language derives from the explicit genus-species and whole-part relationships, its definition of synonymy, the increasingly complete scope notes, and its identification of the sources that provide warrant for the use of the term. AAT has defined 30,000 terms in thirty-six separate hierarchies. These hierarchies describe physical attributes, styles and periods, agents, activities, and materials and objects, but not subject description.

The AAT offers enormous hope in better integrating various forms of materials: abstract and index, visual object, text sources, and bibliography (Allen, 1989). Yet, originally iconography did not fall within the AAT's scope; this policy has been modified in the face of expressed concern from the museum and library fields (Stanley, 1989). The creation of the two hierarchies—Patterns and Motifs and Visual Genre—was in response to those perceived needs. Stanley (1986) also indicated that the need for a more complex vocabulary becomes clearer when considering the indexing of images or bibliographic material.

What do some art experts think about the description needs for fiber art? In a catalog for the 1972 exhibition of the work of Olga de Amaral, a Colombian artist, Galaor Carbonnel, an eminent Colombian critic wrote:

One of the most fallacious of the critical judgments of our culture has been that of classifying and establishing hierarchies based on the presence of basic materials and the technical methods applied to those materials. (Constantine & Larsen, 1986, p. 8)

The concern is there for the structural and aesthetic characteristics of the art fabric as an art form, not its materials and methods, although fiber art begins with material and method.

As Stam (1989) has written, the field of art object cataloging is just beginning to recognize the inadequacy of language as a recording medium for describing a work of art.

There is considerable interest in adding visual components to art object databases, but so far this refinement is quite rare, and while it is an aid to description, it has not in any case solved the problem of retrieval. There seems no way around the problem of developing controlled

language for description, and that is the aspect of art object cataloging which is now receiving the most attention from theorists. (p. 8)

She continues: a simple description of the physical object is not enough. It is "the significance of the piece—a concept representing a perceiver's judgment—based on any one of several criteria." She lists several groups of data that need to be provided including objective data about the work; subjective or interpretive data; style; evaluation; and even more today—signs, signification, and social context.

Stam sees redefining of the problem as due not only to more sophisticated understanding of art data, but also to several recent technological advances: the hard disc, improved communications modes; fairly standard off-the-shelf software packages with flexibility in field definition and manipulation; and relational databases.

Even though what she calls the harmonization of databases is far from complete, the tendency for catalogers of art objects to look beyond their institutions is expanding to include looking at other fields and other approaches. For example, this includes discussions of archival approaches to describing collections, the linguistic concept of "frames" and its implications for faceted classification, nonverbal classification and retrieval of visual imagery, novel applications of the *Art and Architecture Thesaurus*, and increasingly frequent reference to the MARC format as a suitable framework for art object information.

IMAGE DATABASES

While words can conjure up an image in the mind, these same words can produce as many different mind images as there are people receiving the words. An image surrogate of the work would be useful for many purposes, and image databases can offer other facets of information about fiber art. Unlike text or data, visual material often derives its value from the object itself with much of the message conveyed through design, texture, strength of lines, and artistic subtleties (Lunin, 1987).

Some examples of fiber image information systems and related pilot projects follow. Although few in number, they will undoubtedly grow because technology is available and increasingly lower in cost. New technologies and lowering costs will help to meet the needs of art historians who, in Brilliant's (1988) words have "an ultimately insatiable hunger for images" (p. 125).

The Helen Allen Textile Collection

The Helen Allen Textile Collection, located on the campus of the University of Wisconsin, consists of about 12,000 textiles, costumes, and related objects. Although the chronological scope ranges from pre-Columbian and Coptic fragments to contemporary fiber art, the collection includes objects from folk, tribal, and

urbanized cultures around the world. ARTSearch, an interactive laser videodisc computer system, was developed to meet both the intellectual and viewing access needs required of this public resource collection. With a single action the viewer can access the data stored in the computer and view a visual image that is stored on the videodisc.

This database is geared for the most part toward the categorization and cataloging of historic textiles, predominantly flat textiles, although some contemporary fiber works are included in the collection. An additional use of the system allows for a complete condition survey of materials, simplifying a major collections management task. As each object is examined, its condition and current storage can be entered onto ARTSearch with a numerical code and a brief description.

The University of Maryland Historic Textile Database. Established in 1986, the purpose of this database is to create a sophisticated data management program on personal computers to handle the massive amounts of data necessary for research on historic textiles. While the long range goal of this project is to include all flat textiles, the immediate goal was to establish a database on coverlets. The database currently contains information about 10,000 coverlets. The purpose is to be able to search and compare motifs in the same and different geographic areas and study the popularity, uniqueness, origin of motifs, and migration patterns. The system uses PictureWare and an image capture board. While coverlets are not fiber art as defined for this article, this database serves as an example because it does contain textiles and includes images.

The database has five separate segments one of which is the design motifs found in coverlet centerfields, borders, corner blocks, cartouches, and logos. The motif file was established to classify and quantify the use of the design elements. Each record has four fields with the possibility of each coverlet having as many as thirty-five motif records. The motif file will enable users to search and compare motifs with those of other weavers in the same geographic area and those of other weavers in different geographic areas, track the change in motifs over time to determine the widespread use of the design elements, and to determine the popularity and uniqueness of the motifs by quantitative methods (Parsons & Anderson, 1989).

Research and Development

To locate fiber art images in any system, there are still problems in coding, and it is still difficult to recognize an image by its parts or whole. Russell Kirsch, a computer scientist, and Joan Kirsch, an artist, have been working on image recognition by computer for several years. Although their work has focused on paintings, the

principles are basic to fiber art—developing a set of rules, a grammar, that would allow someone to analyze the structure of a set of paintings and to generate similar images. While unable to capture the colors, textures, or brushwork of a completed painting, they were able to concentrate on the geometric framework on which the artist, principally Diebenkorn, draped his paint (Peterson, 1986). It takes only about eight bytes of data to describe the rules and steps needed to recreate the basic structure in a typical Diebenkorn painting, while about a million or more bytes of information would be needed to produce a decent representation of one of his pictures by scanning it electronically.

Research on Image Description

Rorvig (1987) measured the effect on human judgment of the inclusion of images in the bibliographic records of archival materials. His research indicates that a thorough reconsideration of both the amount of description for images as well as the relation between the physical data image and its pointer surrogate is required.

DISCUSSION

It is clear that art fabric works have gained status throughout the world. Constantine and Larsen (1986) stated: "While this art form may be in search of nomenclature, it demands and deserves autonomy" (p. 7).

The field still needs more specific as well as broader nomenclature and terminology, as judged from the paucity of terms used by several major abstract and index publications and databases to describe the art. As we have seen, there are varied users with varied needs. For some of those users it would be helpful if the abstracting and indexing services were to include more descriptive terminology, enabling the user to be more specific during a search. Broader coverage of the literature is also desirable, for a review of serials revealed that some of the basic fiber art serials are not covered.

Some users need much description, perhaps even full-text fields. Jost (1986/1987) proposes that art historians would be more inclined to use databases developed for art history if they contained greater amounts of data. He explains that the art historian still prefers to work with a large quantity of information and "will forego the comforts of standardized and integrated systems which offer little [limited] information in favor of a large quantity of less-structured data, even if it means working with several different databases of various listings and thesaurae" (p. 50). He suggests the use of scanners programmed specifically for reading the research materials of art history. This method of input may well be a satisfactory procedure for periodical articles about fiber art. If the articles were prepared

in a standardized structured form, an unlikely event in the next several years, the relevant sections could be identified and entered into fields in databases designed for that purpose.

And what of the description of a specific work and its pictorial representation? Who will fill out the long form that is inherent in providing more information proposed for fiber art records? This is a labor intensive process and thus expensive, perhaps prohibitively so.

Images

There appears to be almost universal agreement that the image is desired in the database record together with textual information. Ostby (1987) states that the visual impression is very important for the analysis of objects, and a text cannot compensate for a documentation photo.

The problems in coding fiber images remain. Unfortunately, as Bearman (1989) writes; we still don't know how to "describe" an image, although the work of Kirsch and Kirsch (Kirsch, 1985; Kirsch & Kirsch, 1988) in devising a grammar for the field is providing some understanding. But from a linguistic point of view, indexing the images for access from a multiplicity of interests is still a chancy proposition because it can be perceived from so many different perspectives (Bearman 1988, 1989). From long experience, Bearman explains, we are aware of how poorly words are suited to this task.

Even with a mass of information available to apply to a work, it is difficult to describe the concept and other important aspects with just a few index terms or a classification. While in time the new technology offering image information handling can be a boon to fiber art study, appropriate index terms are still needed to locate a work, and good description is still necessary to provide even a moderate understanding of the work.

There are real and basic differences between the documentation of a bibliographic item and an art object. One set of documentation acts as a pointer to the literature in the book. The other set of documentation acts, as Barnett (1988) explains, as a complete description of an otherwise mute subject. Whatever there is to say about that object may be totally contained in the surrogate record, including an image of that object. She continues: "The real difference between object and bibliographic item information is that the direct description enumerates and the bibliographic content description abstracts..." (p. 200).

Whether the image should be analog or digital is still controversial. When comparing videodisc and digital representation of fiber art, videodisc (analog) seems quite suitable for most needs at the present time and could be useful for many purposes. In the

future it may be possible to digitize images of fiber art to enhance the study of the art, to compare images more easily, to rotate, zoom in, give scale, and place the image in an architectural environment as well as to study its structure microscopically. But, at present, a digitized image requires vast amounts of storage space and a large amount of transfer time for its use to be productive.

Record Linkages, Hypertext, Hypermedia

The art historian and others would find it helpful if records could be linked in both hypertext and hypermedia. However, as Bearman (1989) wrote, the technical and conceptual limitations of our approaches to multimedia humanities knowledge bases make it unlikely that we will see any universal products in our lifetimes. However, he holds out the hope that we might still construct quite exciting, if limited, multimedia bases for particular types of users.

Challenges in General

While the problems and challenges in describing fiber art have been examined here more generally, the article shows how the challenges fiber art presents can be extended to the general problem of terminology and description for any visual object. Although pattern recognition techniques are being developed to identify technique, color, and shape, pattern recognition by itself cannot determine the history, cultural interpretations, composition, and intent of some of the elements included in the fiber work. Words still are needed to convey information about the object.

Even more, associated trails to information leading to further understanding of a work can often be helpful, such as those that hypertext and hypermedia can offer. Additionally, the comments of the scholarly users of the system could supplement the record along with a kind of running citation index. In medicine, this would be called a longitudinal health record, beginning with the information about the parents (the creator) and ending only with the death and autopsy report. In art, we hope that there will be no death of the work, that a work of significance will endure, preferably in a museum where it can be cared for by knowledgeable conservators.

Perhaps at this time in the life of fiber art and other art forms what we may need are some basic user studies. In her wrap-up essay to the Authority Control Symposium in 1986, Carol Mandel concluded that "the key to future improvements lies in user studies and intelligent analyses of user behavior" (Muller, 1987, p. 34). Added to this is one more component, the analysis of the information itself, which as Reed and Sledge (1988) point out, is essential to the understanding of information requirements.

The Real Importance of Fiber Art

In the final analysis, however, it is not the intellectual aspects of the fiber work that are important. Rather, the work is significant because of the way it was created and the response it generated—e.g., excitement, a probing intellectual interest, or perhaps even strongly negative fear and revulsion. It may have offered a new way of looking at the world—at human interaction with their own thoughts, with other human beings, with the environment, with the unknown. How to document such intangibles requires keen perception, carefully selected words, and a rapport with the art itself.

In fiber art as in all art, the creative pursuit is, to extrapolate from Brite and Stamsta (1986), to explore new concepts, to push at the boundaries, to investigate a variety of materials and techniques, and to think and do, do and think, until there is some kind of breakthrough when a new world of fresh possibilities appears—an original art form for which there is no precedent. How to describe that art for one's contemporaries and future generations is the real challenge we face.

SUMMARY

The field of fiber art and the art fabric is one of intense activity, deliberation, exploration, and experimentation. Its description should mirror that energy and devotion. This article suggests some kinds of terms needed by people working in aspects of fiber art. How the terms are rationalized should be determined by representation of the information professionals concerned with the use of the terminology at the provider end and by the types of interests reflected at the user end. Also, as many of us who have worked on thesauri and design of information systems recognize, a new field that keeps evolving requires flexibility in its terminology so that terms describing new techniques and materials can be added. While the new technologies that make possible the addition of images is a great step forward, words are still needed to provide a fourth dimension—that of the contextual and intentional information.

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